8A Finding Cartesian Equations

1. a) Draw the graph of the function:

$$x = 2t \qquad y = t^2$$

$$-3 \leq t \leq 3$$

b) Find the Cartesian equation of the curve

2. A curve has parametric equations:

$$x = ln(t + 3) \quad y = \frac{1}{t+5}$$

a) Find a Cartesian equation of the curve in the form $y = f(x)$, $x > k$, where k is a constant to be found.

b) Write down the range of $f(x)$